

AMENDMENTS TO THE DRAWING FIGURES

Figure 5 has been amended by adding number 38.

REMARKS

The Examiner in rejecting claims 21-27 and 31-40, and in particular independent claim 21, contends that the same contains new subject matter, namely, that the "rear plate... extending orthogonally upward from the bottom plate and that an alignment member carried by one of the rear plates and extending into the trough and having first and second faces offset from each other adapted to align for aligning the pair of workpieces with the grooves in the bottom plate" is not supported by the original specification and thus constitutes new matter. Applicant respectfully disagrees with this position since as clearly shown in Fig. 5 of the drawings, rear plate 40 extends orthogonally upward from the bottom plate as shown on the attached Exhibit A of Fig. 5. As shown in Exhibit B, orthogonal is defined as, "pertaining to or are composed of right angles", which right angle is clearly shown in the Fig. 5 as marked in red, which drawings form part of the specification and disclosure. Furthermore, Fig. 1 clearly shows an alignment member 60 which is carried by the rear plate (back support 50) and extends into the trough 38, which as indicated above is clearly shown in Fig. 5, and that alignment member 62 has first and second faces offset from each other, namely surfaces 64 and 66, for aligning a pair of workpieces 12 with the grooves 22 in bottom plate 20. This subject matter is also discussed in the first paragraph, Page 6 of the specification, which states:

"The back alignment member 60 is joined to the back plate 40. A block 62, with an extended wall 64, a connecting wall 66 and an inset wall 68, may be joined with a fastener extending through the alignment aperture 54 to the back plate 40. The extended wall 64 is positioned to offset two boards 12 from two boards 12 biased against the inset wall an amount equal to the width of the route 16."

Thus, the alleged "new matter" limitations of claim 21 are clearly set forth and shown in the specification and drawings. To further clarify these structures and relationships, amendments to the specification is requested wherein the trough area is assigned a number 38 which has been added to Fig. 5 and set forth in line 2 of page 5, and that the first full paragraph beginning on Page 5, line 4 has been amended to further specify that the back plate extends orthogonally upwardly from

the bottom plate as clearly shown in Fig. 5 of the drawings, which again said drawings form part of the specification, and thus discloses the subject matter, and accordingly cannot be considered new matter since the same is clearly shown in the drawings. Furthermore, the relationship of the offset walls 66 and 64 clearly shown in Fig. 1 has been further defined in the proposed amendment of Page 6, line 2. Again, this feature and structural arrangement is clearly shown in Fig. 1 of the drawings, and also described in the specification first paragraph, Page 6, and thus it is respectfully submitted cannot be considered to be new matter. Accordingly it is respectfully requested that the new matter rejection of claim 21 be withdrawn.

Furthermore, it is respectfully requested that the rejection of independent claim 21 under 35 USC 112 be withdrawn since the specification clearly provides the structure for the alignment member carried by the rear plate extending into the trough having the first and second faces offset from each other as clearly shown in Fig. 1 of the drawings, and described in the specification, in particular in the first paragraph of Page 6. Furthermore, it is submitted with respect to claim 21, that the rear plate extends orthogonally upwardly from the bottom plate as clearly shown in Fig. 5, and that the alignment member 60 is carried by the rear plate and extends into the trough and has first and second faces 64 and 66 offset from each other, as clearly shown in Fig. 1 and described in the first paragraph of Page 6.

The Office Action then rejects claim 21 under 35 USC 102(b) as being anticipated by Gibson (US 5,285,832). Initially in Gibson, rear plate 16 extends downwardly, not upwardly from bottom plate 18 as defined in claim 21. Thus plate 16 of Gibson cannot define any type of trough area adapted to receive workpieces (boards) therein as defined in claim 21. Although Gibson is capable of aligning a pair of workpieces, it does not attempt to, nor does it include any structure, namely a pair of first and second faces offset from each other which extend into a trough area, for offsetting the boards as clearly defined in claim 21. In Gibson, as discussed in Column 3, lines 5-15, a first piece of wood 22 is held in a clamped position for cutting grooves and then by reversing the template 15, a second set of grooves are cut to provide the offset grooves to be subsequently joined to the first

cut groove to form the box joints. In Applicant's invention, the first and second offset faces enable offset grooves to be formed in at least a pair of boards with a single cut and does not require the reversal of any template 15 or other component as required in Gibson for forming the second board having the grooves offset from those grooves formed in the first board. Thus, two separate cuts are required in Gibson, as clearly discussed in Column 3, lines 5-15, to form the two sets of offset grooves, whereas in Applicant's jig, this is accomplished in a single cut due to the first and second offset faces of the alignment member which extends into the trough area. Thus, the jig of Gibson would require twice the work to form the required box joint as that required by Applicant's jig.

The Office Action furthermore rejects claim 21 under 35 USC 102(b) as being anticipated by Hanks (US 4,966,507). The Office Action alleges that Hanks has a bottom plate 12 which has a plurality of grooves 22, a rear plate 14 and alignment members 96 and 98. Rear plate 14 is a horizontal guide which is adjustably slidably mounted in grooves 22, which grooves 22 are not adapted to selectively receive a cutting tool therein as do the grooves of Applicant's bottom plate. Most importantly, the alleged alignment members 96 and 98 form a clamp which holds the stock (boards) vertically in the jig (See Column 6, lines 17-21). Members 96 and 98 have absolutely no first and second faces which are offset from each other, nor do they extend into any trough area since they are located completely beneath bottom plate 12 as shown in Fig. 2. Thus, Hanks does not show a bottom plate having a plurality of grooves for selectively receiving a cutting tool therein, nor any alignment member having first and second faces offset from each other for aligning a pair of workpieces in an offset relationship with the grooves in the bottom plate as defined in claim 21.

Thus, it is respectfully submitted that claim 21 as now amended clearly defines over Gibson and Hanks and is entitled to allowance, together with claims 22-27 and 31-40 depended therefrom, and action to the effect is respectfully requested.

Respectfully submitted this 2nd day of August, 2007.

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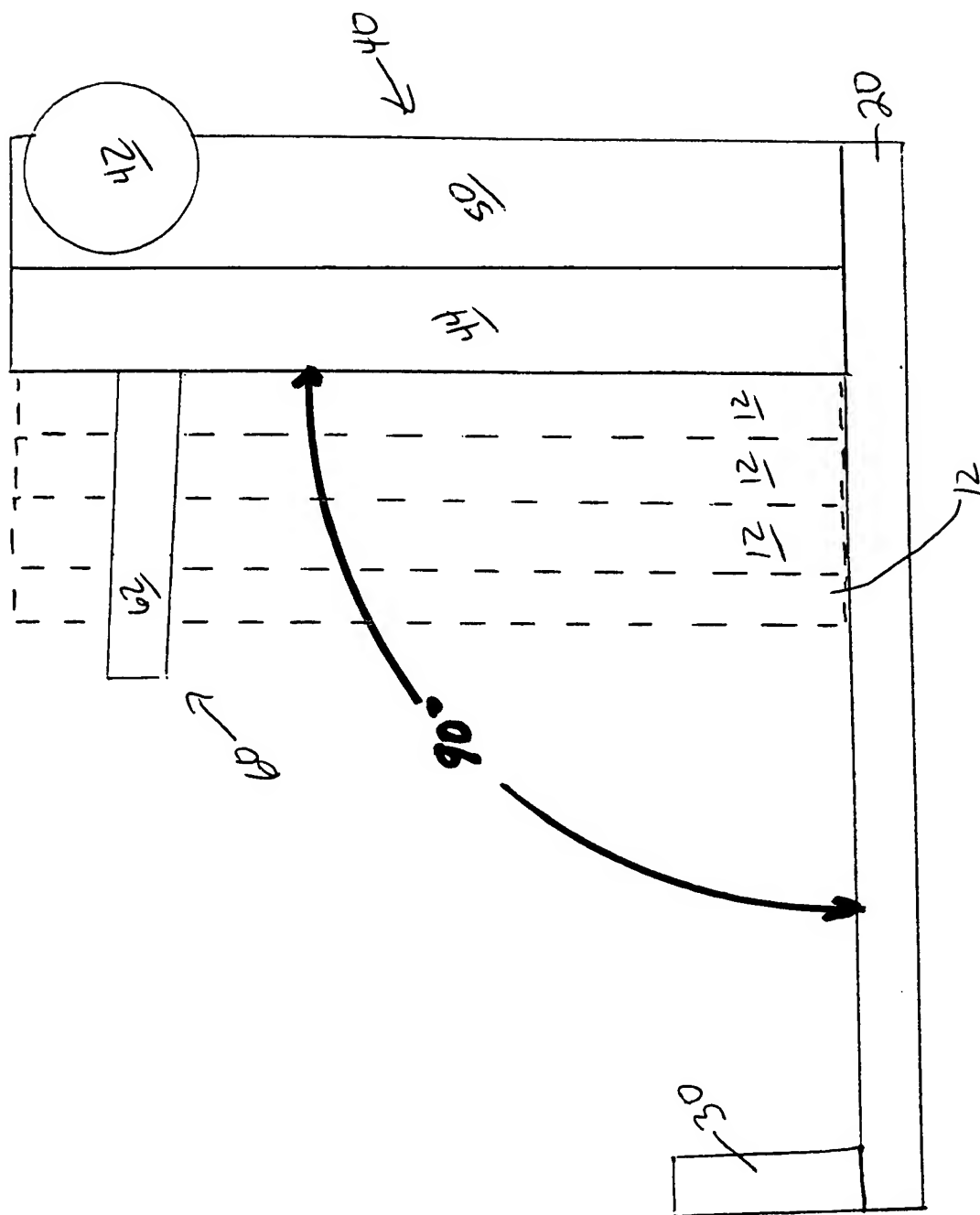
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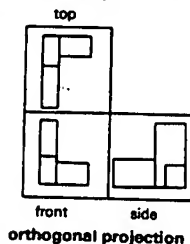
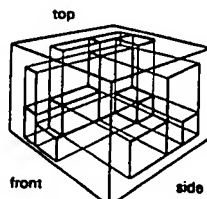
Karina A. Butler



orography | orthorhombic



Orpheus
Statue by Swedish sculptor
Carl Milles



orthogonal projection

EXHIBIT

B



orphrey
Fifteenth-century
Spanish cope with
silk-embroidered orphrey

o-ro-graphy (ô-rô-gră-fî) *n.* The study of the physical geography of mountains and mountain ranges. [ORO- + -GRAPHY.] — **o-ro-graphic** (ô-rô-grăf'ik, ôr'-) *adj.* — **o-ro-graph'i-cal-ly** *adv.*

o-ro-ide (ô-rô-id', ôr'-) *n.* Also **o-ro-ide** (ô-rô-id', ôr'-). An inexpensive alloy of copper, zinc, and tin, used in imitation gold jewelry. [French *oréide*: *or*, gold, from Latin *aurum*, gold (see *aurum* in Appendix*) + *-éide*, -oid.]

o-ro-log-y (ô-rô-lô-jî) *n.* The study of mountains. [ORO- + -LOGY.] — **o-ro-log'i-cal** (ô-rô-lô-j'i-kal, ôr'-) *adj.* — **o-ro-log'i-cal-ly** *adv.* — **o-ro-logist** *n.*

O-rôn-tês (ô-rôn-têz). A river rising in northwestern Lebanon and flowing 250 miles north through Syria, and southwest through Turkey to the Mediterranean Sea.

o-ro-tund (ô-rô-tûnd', ôr'-) *adj.* 1. Full in sound; sonorous: *orotund tones*. 2. Pompous and bombastic: *orotund talk*. [Latin *ôre rotundus*, "with round mouth": *ôre* (stem *ô-*), mouth (see *os* in Appendix*) + *rotundus*, rounded, ROTUND.] — **o-ro-tund'i-ty** (ô-rô-tûn'dô-tî, ôr'-) *n.*

O-roz-co (ô-rôz'kô), José Clemente, 1883-1949. Mexican painter and lithographer.

orphan (ôr'fan) *n.* A child whose parents are dead; sometimes, a child who has lost one parent by death. — *adj.* 1. Being an orphan. 2. For orphans: *an orphan home*. — *tr.v.* orphaned, -phanes, -phans. To deprive (a child) of one or both parents. [Late Latin *orphanus*, from Greek *orphanos*, orphaned. See *orphan* in Appendix*.] — **orphan-hood** *n.*

orphan-age (ôr'fa-njî) *n.* 1. A public institution for the care and protection of orphans and abandoned children. 2. The state or condition of being an orphan.

Or-pho-us (ôr'fô-ûs, -fôûs). The legendary Thracian poet and musician to whom the establishment of the Orphic mysteries was ascribed. — **Or-pho-e-an** (ôr'fô-ân, ôr'fô-ân) *adj.*

Or-phic (ôr'fik) *adj.* 1. Of or ascribed to Orpheus; *the Orphic poems*; *Orphic mysteries*. 2. Of, pertaining to, or characteristic of the dogmas, mysteries, and philosophical principles set forth in the poems ascribed to Orpheus. 3. Capable of casting a charm or spell as Orpheus did by his singing. 4. Sometimes small *o*. Mystic or occult in nature; esoteric. [Latin *Orphicus*, from Greek *Orphikos*, from ORPHEUS.] — **Or-phic-ally** *adv.*

Or-phism (ôr'fiz-əm) *n.* An ancient Greek mystery religion arising in the sixth century B.C. from a synthesis of pre-Hellenic beliefs with the Thracian cult of Dionysus Zagreus and soon becoming mingled with the Eleusinian mysteries and the doctrines of Pythagoras, but continuing to influence later antiquity through the Orphic poems and kindred teachings incorporated by Neo-Platonic thought. [French *orphisme*, from *Orphée*, Orpheus, from Greek *Orpheus*, ORPHEUS.] — **Or-phist** *n.*

or-phrey (ôr'frî) *n.* *pl.* -phreys. Also *or-frey* (ôr'frî). 1. A band of elaborate embroidery decorating the front of certain ecclesiastical vestments. 2. Any elaborate embroidery, especially when made of gold. [Middle English *orfreys*, *orphreys* (taken as plural), from Old French *orfrey*, from Medieval Latin *aurifrigium*: Latin *aurum*, gold (see *aurum* in Appendix*) + *Phrygium*, neuter of *Phrygius*, PHRYGIAN.]

or-piment (ôr'pô-mant) *n.* Arsenic trisulfide, As₂S₃, a lemon-yellow pigment, used in tanning and in linoleum manufacture. [Middle English, from Old French; from Latin *auripigmentum*: *aurum*, gold (see *aurum* in Appendix*) + *pigmentum*, PIGMENT.]

or-pine (ôr'pin) *n.* Any of several plants of the genus *Sedum*; especially, *S. telephium*, native to Eurasia, having clusters of reddish-purple flowers. Also called "live-forever." [Middle English *orpin*, from Old French *orpine*, short for *orpinet*, ORPINET, probably after the yellow flowers of one species.]

Or-pling-ton' (ôr'ping-tan). A former administrative division of London, England, now part of Bromley (see).

Or-pling-ton' (ôr'ping-tan) *n.* A breed of domestic fowls having a large body, a single comb, and unfeathered legs. [From *Orplington*, Kent, England, where the breed originated.]

or-re-ry (ôr'rê, ôr'-) *n.* *pl.* -ries. A mechanical model of the solar system. [After Charles Boyle (1676-1731), fourth Earl of Orrery, for whom one was made.]

or-ris (ôr'ris, ôr'-) *n.* 1. Any of several species of iris having a fragrant rootstock; especially, *Iris florentina*. 2. Orrisroot. [Variant of IRIS.]

or-ris-root (ôr'ris-rôot', -rôot', ôr'-) *n.* The fragrant rootstock of the orris, used in perfumes and cosmetics.

Orsk (ôrsk). A city of the Soviet Union, in the southern Ural Mountains, on the Ural River. Population, 210,000.

ort (ôr't) *n.* Usually plural. Archaic. 1. A small scrap or leaving of food after a meal is completed. 2. A scrap; bit. [Middle English, probably from Middle Dutch *orte*, contraction of *oor aete*, leftover, "out eat": *oor*, out (see *ud* in Appendix*) + *aeten*, to eat (see *ed* in Appendix*).]

orth, **orthedic**, **orthopedics**.

or-thi-con (ôr'thi-kôn) *n.* A television camera pickup tube that uses a low-velocity electron beam to scan a photoactive mosaic. Also called "image orthicon." [ORTH(O) + ICON(SCOPE).]

or-tho (ôr'thô) *adj.* 1. *Chemistry*. *a.* Designating the most fully hydrated form of an acid or of its salts. *b.* Of, pertaining to, or designating adjacent carbon positions in a benzene ring. 2. *Physics*. Designating diatomic molecules in which the nuclei have the same spin directions. [From ORTHO-]

ortho-, **orth-**. Indicates: 1. Straight or upright; for example, orthotropic. 2. Mathematics. Perpendicular to or at right angles; for example, orthorhombic. 3. Correct or standard; for example, orthography. 4. Medicine. Correction of maladjustments or deformities; for example, orthopedics. [Middle English, from Old French, from Latin, from Greek, from *orthos*,

straight, correct, right, upright. See *wardh* in Appendix*.]

or-tho-center (ôr'thô-sên'tar) *n.* The point of intersection of the three altitudes of a triangle.

or-tho-ce-phal-ic (ôr'thô-sê-fal'ik) *adj.* Also **or-tho-ceph-a-lous** (ôr'thô-sêf'ô-las). Having a ratio of skull height to skull length between 0.70 and 0.75. [ORTHO- + -CEPHALIC.] — **or-tho-ceph'a-ly** (ô-sêf'ô-lî) *n.*

or-tho-chro-mat-ic (ôr'thô-kro-mât'ik) *adj.* 1. Of, having, or reproducing the colors of nature accurately. 2. Of or pertaining to a film, plate, or emulsion that renders all colors, except red, in tones of gray approximating the relative brilliance of these colors. — **or-tho-chro-ma-tism** (-kro'mô-tîz-əm) *n.*

or-tho-clase (ôr'thô-klás', -kláz') *n.* A feldspar (see); essentially potassium aluminum silicate, KAlSi₃O₈, characterized by a monoclinic crystalline structure and found in igneous or granitic rock. Also called "potash feldspar." [German *Orthoklas*: ORTHO- + -CLASE.]

or-tho-clas-tic (ôr'thô-klás'tik) *adj.* *Geology*. Having right-angled cleavage. [German *orthoklastisch*: ORTHO- + -CLASTIC.]

or-tho-don-tia (ôr'thô-dôn'shâ) *n.* The dental specialty and practice of correcting abnormally aligned or positioned teeth. Also called "orthodontics." [ORTHO- + Greek *odon*, tooth (see *odont*).] — **or-tho-don't-ic** *adj.* — **or-tho-don't-ist** *n.*

or-tho-dox (ôr'thô-dôks') *adj.* 1. Adhering to the accepted or traditional and established faith, especially in religion. Compare *heterodox*. 2. Adhering to the Christian faith as expressed in the early Christian ecumenical creeds. 3. Adhering to a commonly accepted, customary, or traditional practice or belief. 4. *Capital O*. *a.* Of, pertaining to, or designating any of the churches of the Eastern Orthodox Church. *b.* Of, pertaining to, or denoting Orthodox Judaism. [Old French *orthodoxe*, from Late Latin *orthodoxus*, from Greek *orthodoxos*, having the right opinion: ORTHO- + *doxa*, opinion, from *dokkein*, to think, seem (see *dek* in Appendix*).] — **or-tho-dox'i-ty** *n.*

Orthodox Church. The Eastern Orthodox Church (see). **Orthodox Judaism**. The branch of the Jewish faith that adheres to the Mosaic Law as interpreted in the Talmud, and considers it binding in modern as well as ancient times. Compare *Conservative Judaism*, *Reform Judaism*.

or-tho-dox-y (ôr'thô-dôk'sî) *n.* *pl.* -ies. 1. The quality or state of being orthodox. 2. Orthodox practice, custom, or belief.

or-tho-e-py (ôr'thô-ê-pê, ôr'thô-êp'ê) *n.* 1. The study of the pronunciation of words. 2. The customary pronunciation of words. [New Latin *orthoepeia*, from Greek *orthoepeia*: *ortho* + *epos*, word (see *ewkw* in Appendix*).] — **or-tho-e-p'i-cal** (ôr'thô-êp'ik), or **or-tho-e-p'i-cal** *adj.* — **or-tho-e-pist** *n.*

or-tho-gen-e-sis (ôr'thô-jên'sîs) *n.* 1. *Biology*. The theory that evolutionary change is predetermined by the constitution of germ plasma and independent of external factors. 2. *Sociology*. The theory that all cultures pass through sequential periods in the same order. [New Latin: ORTHO- + -GENESIS.] — **or-tho-gen-e'tic** (-jên-êt'ik) *adj.* — **or-tho-gen-e'ti-cal-ly** *adv.*

or-tho-gen-ic (ôr'thô-jên'tik) *adj.* *Psychiatry*. Pertaining to the correction or treatment of mental and emotional abnormalities in children. [ORTHO- + -GENIC.]

or-thog-na-thous (ôr'thô-nâ-thas) *adj.* Also **or-thog-na-thous** (ôr'thô-nâth'ik). Having the lower jaw aligned with the upper so that it does not protrude or recede. [ORTHO- + -GONATHOUS.] — **or-thog-na-thism**, or **or-thog-na-thy** *n.*

or-thog-o-nal (ôr'thô-gô-nal) *adj.* *Mathematics*. Pertaining to or composed of right angles. [Greek *orthogônios*: ORTHO- + *gônia*, angle (see *genu* in Appendix*).] — **or-thog-o-nal-ly** *adv.*

orthogonal projection. The two-dimensional graphic representation of an object formed by the perpendicular intersection of lines drawn from points on the object to a plane of projection. Also called "orthographic projection."

or-tho-graph-ic (ôr'thô-grăf'ik) *adj.* Also **or-tho-graph-i-cal** (ôr'thô-grăf'i-kal). 1. Of or pertaining to orthography. 2. Spelled correctly. 3. *Mathematics*. Having perpendicular lines. — **or-tho-graph'i-cal-ly** *adv.*

or-thog-ra-phy (ôr'thô-gră-fî) *n.* *pl.* -phies. 1. The art or study of correct spelling according to established usage. 2. The system of language study concerned with letters and their sequences in words. 3. Any method of representing the sounds of language by literal symbols. [Middle English *ortografe*, from Old French, from Latin *orthographia*, from Greek: ORTHO- + -GRAPHY.] — **or-thog-ra-pher**, or **or-thog-ra-phist** *n.*

or-tho-pe-dics (ôr'thô-pê-diks) *n.* Also **or-tho-pæ-dics**. Plural in form, used with a singular verb. *Abbr.* orth. The surgical or manipulative treatment of disorders of the skeletal system and associated motor organs. [From French *orthopédie*: ORTHO- + Greek *paideia*, education, from *paio* (stem *paid-*), child (see *pou* in Appendix*).] — **or-tho-pê-dic** *adj.* — **or-tho-pê-dic-ly** *adv.* — **or-tho-pê-dist** *n.*

or-tho-psych-i-at-ry (ôr'thô-sî-kî'ô-trî, -sî-kî'ô-trî) *n.* The psychiatric study and treatment of incipient and borderline mental disorders, especially their development in the young. — **or-tho-psych-i-at-ric** (-sî-kî-â't'rik), or **or-tho-psych-i-at-ric-ian** *adj.* — **or-tho-psych-i-at-rist** *n.*

or-thop-ter-an (ôr'thôp'tar-on) *n.* Also **or-thop-ter-on** (ôr'thôp'tar-on). Any insect of the order Orthoptera, characterized by membranous, folded hind wings covered by leathery narrow fore wings, and including the locusts, cockroaches, crickets, and grasshoppers. [New Latin *Orthoptera* (or "straight-wings"): ORTHO- + -ptera, from *ptero*, wing (see *pter* in Appendix*).] — **or-thop-ter-an**, or **or-thop-ter-ous**, or **or-thop-ter-al** *adj.*

or-tho-rhomb-ic (ôr'thô-rôm'bik) *adj.* Of or pertaining to a crystalline structure of three mutually perpendicular axes of different length. Also "rhombic."

â pat/â pay/âr care/â father/b bib/ch church/d deed/ê pet/ê be/f five/g gag/h hat/hw which/i pit/i ple/lr ples/j judge/k kick/l needle/m mum/n no, sudden/ng thing/ô pot/ô toe/ô paw, for/oi noise/ou out/ôo took/ôo book/p pop/r roar/s sauce/sh

